



Simulations, Modelling and Software Development for Performance Critical Systems

Tommi Flink, CEO

Magister in brief

TEAM

Nearly 30 employees about half of them having PhD degree or working towards PhD

COMPETENCES and TECHNOLOGIES

System simulations, modelling of telecommunication systems, AI/ML, experience in development of performance critical software, web- and mobile applications, management of databases, virtual server environments and test automation

Languages: C, C++, C#, VB.NET, HTML5, JavaScript, Qt, PHP, Java (Android), Swift (iOS), scripts

SECTORS & PARTNERS

Mobile and satellite communication vendors and operators, financial sector, software industry, manufacturing industry

COMPANY

Privately held company, established in 2005.



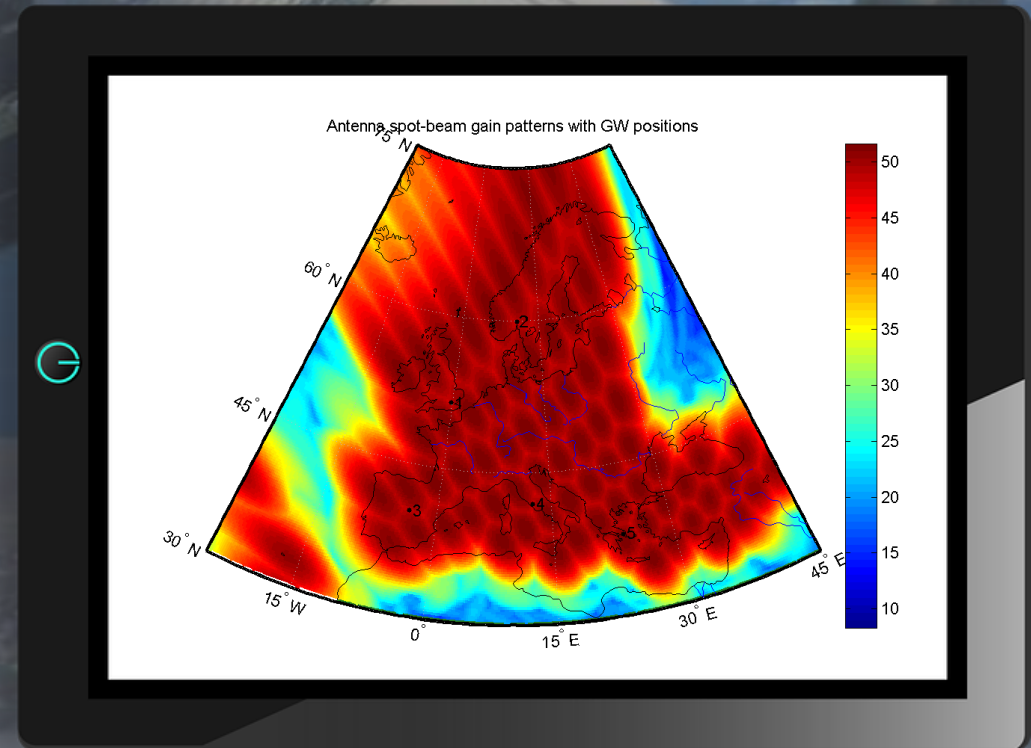


Reference Projects Within Space Industry



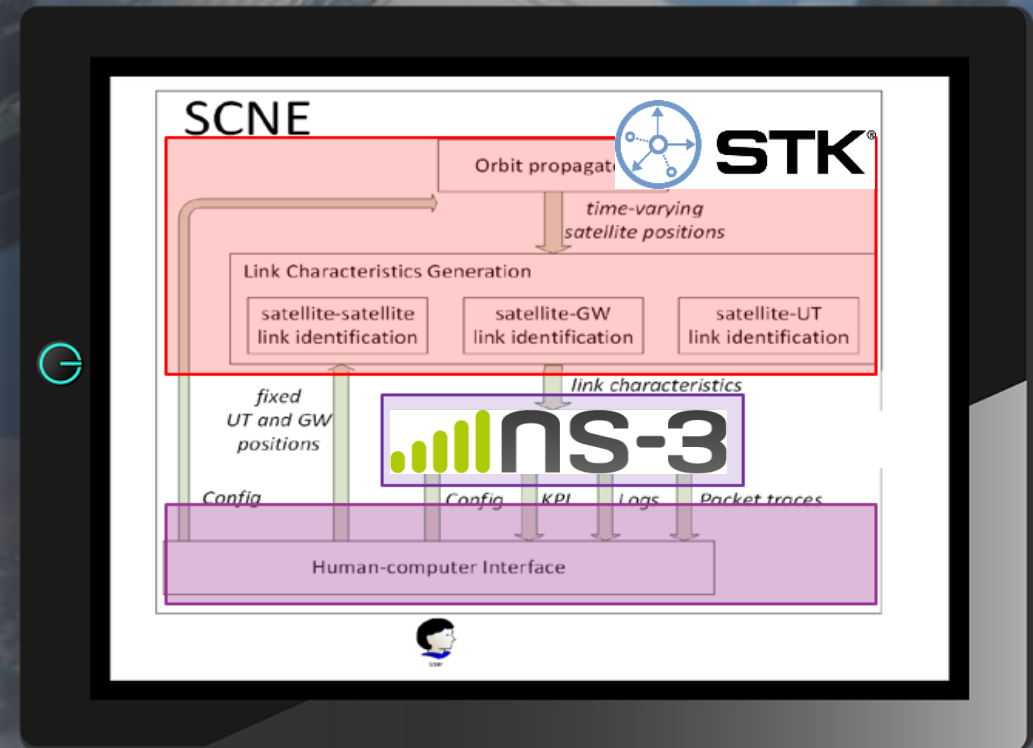
Satellite Network Simulator 3 (SNS3)

- Magister developed SNS3 simulator within ESA project "Development of an open-source, modular and flexible satellite network simulator"
- Dynamic system/network simulator for geostationary satellite system design and optimization
- Users in over 40 organizations in Europe
- SW code released in public and is jointly maintained by CNES and Magister Solutions <http://sns3.org>
- Latest updates by Magister Solutions include beamhopping, aeronautical mobility model and DVB-S2x
- Web page: <http://satellite-ns3.com/>



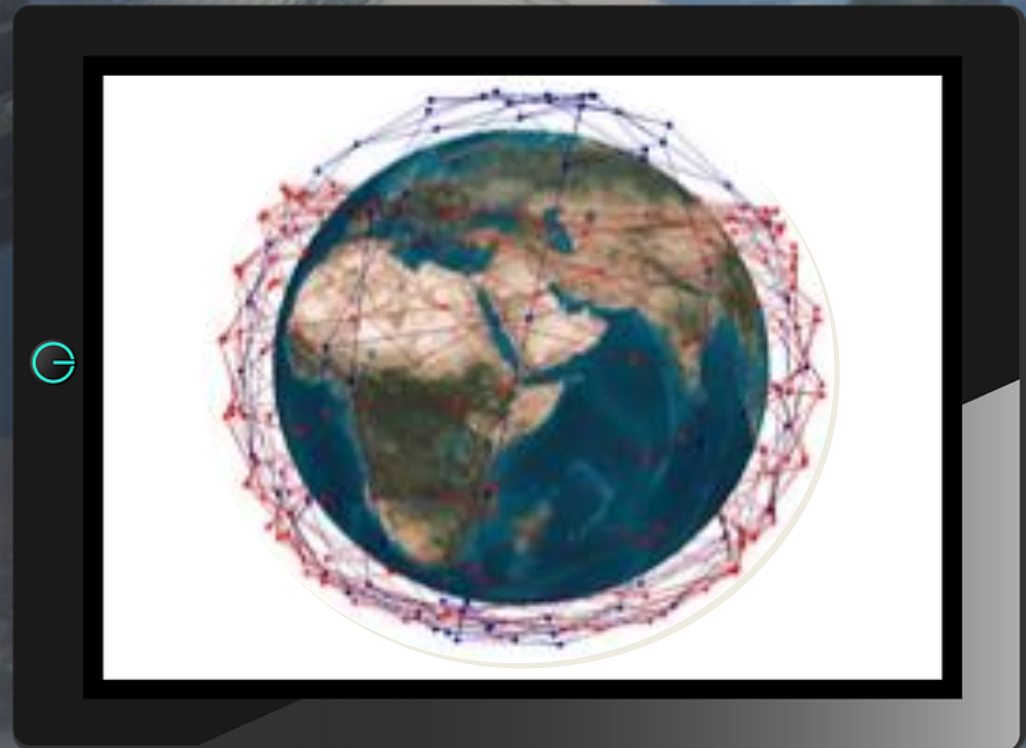
Satellite Constellation Network Emulator (SCNE)

- ESA Project AO8939 - Status: on-going
 - <https://artes.esa.int/projects/scne>
- Objective - Study of protocol performance used in future LEO constellations up to several hundreds of satellites by developing an integrated platform for satellite constellation design and optimization
- Magister Solutions main responsibility is to develop network simulator for data link and above protocol layers



Constellation – Dynamic Resource Allocation Management (C-DReAM)

- ESA Project AO9297 - Status: on-going
- Objective
 - Design RRM algorithm for NGSO satellite constellation
 - Target to meet non-uniform and evolving user demand by means of payload flexibility and reconfigurability while taking other systems and regulatory constraints into account
 - Usage of AI/ML methods for resource allocation
- Magister Solutions main responsibility is to develop a reusable system simulator to test the RRM algorithm performance and complexity



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S O L U T I O N S

